

New claims:

- 1. A preparation comprising
 - (i) at least one difformate of the general formula $XH(COOH)_2$, where $X = Na, K, Cs, NH_4$ and
 - (ii) at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one ester of the carboxylic acid and/or at least one derivative of the carboxylic acid, where the compounds employed as carboxylic acid (ii) are selected from the group consisting of acetic acid, propionic acid, butyric acid, lactic acid, citric acid, isobutyric acid, valeric acid, isovaleric acid, pivalic acid, oxalic acid, malonic acid, salicylic acid, tartaric acid, succinic acid, glutaric acid, glyceric acid, glyoxylic acid, adipic acid, pimelic acid, suberic acid, azelaic acid, sebacic acid, propiolic acid, crotonic acid, isocrotonic acid, elaidic acid, maleic acid, fumaric acid, muconic acid, citraconic acid, mesaconic acid, camphoric acid, o., m., p.-phthalic acid, naphthoic acid, benzoic acid, toluic acid, hydratropic acid, atropic acid, cinnamic acid, isonicotinic acid, nicotinic acid, bicarbamic acid, 4,4'-dicyano-6,6'-binicotinic acid, 8-carbamoyloctanoic acid, 1,2,4-pentanetricarboxylic acid, 2pyrrolecarboxylic acid, 1,2,4,6,7-naphthalenepentaacetic acid, malonaldehydic acid, 4-hydroxyphthalamic acid, 1-pyrazolecarboxylic acid, gallic acid or propanetricarboxylic acid.
- 2. A preparation as claimed in claim 1, wherein potassium diformate is employed as diformate.
- 3. A preparation as claimed in claim 1 and/or 2, wherein the carboxylic acid employed is
 - (iii) benzoic acid and/or the salts of benzoic acid and/or esters of benzoic acid and/or derivatives of benzoic acid and/or the salts of benzoic acid derivatives and/or esters of benzoic acid derivatives.
- 4. A preparation as claimed in at least one of the preceding claims, wherein sodium propionate is employed as (ii).
- 5. A preparation as claimed in at least one of the preceding claims, wherein the ratios by weight of (i) to (ii) are between 0.01:1 and 1:0.01.



- 6. A preparation as claimed in at least one of the preceding claims in solid form, especially in the form of a powder, especially in the form of a powder having an average particle size of from 1 μ m to 10 000 μ m.
- 7. A preparation as claimed in claim 6, which is in the form of a powder having an average particle size of from $10 \mu m$ to $5 000 \mu m$.
- 8. A preparation as claimed in any of the preceding claims, which comprises further ingredients and/or additives and/or carriers.
- 9. A process for producing preparations as claimed in claim 1, which comprises mixing (i) with (ii).
- 10. A process as claimed in claim 9, wherein a solution of (i) and/or (ii) is mixed with a solution of (i) and/or (ii) and, where appropriate, the solvent(s) is(are) subsequently removed.
- 11. A process for producing preparations comprising
 - (i) at least one difformate of the general formula $XH(COOH)_2$, where $X = Na, K, Cs, NH_4$ and
 - (ii) at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one ester of the carboxylic acid and/or at least one derivative of the carboxylic acid, where the carboxylic acid comprises up to 12 C atoms, characterized in that (i) and/or (ii) are mixed in the form of a melt with (ii) and/or (i)
- 12. A process for producing preparations comprising
 - (i) at least one diformate of the general formula $XH(COOH)_2$, where X = Na, K, Cs, NH_4 and
 - (ii) at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one ester of the carboxylic acid and/or at least one derivative of the carboxylic acid, where the carboxylic acid comprises up to 12 C atoms, in which
 - (i) at least one diformate is mixed where appropriate with further ingredients and/or additives,
 - (b) the mixture obtained in this way is coated with at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one



ester of the carboxylic acid and/or at least one derivative of the carboxylic acid.

- 13. A process for producing preparations comprising
 - (i) at least one difformate of the general formula $XH(COOH)_2$, where $X = Na, K, Cs, NH_4$ and
 - (ii) at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one ester of the carboxylic acid and/or at least one derivative of the carboxylic acid, where the carboxylic acid comprises up to 12 C atoms, in which
 - (a) at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one ester of the carboxylic acid and/or at least one derivative of the carboxylic acid are introduced into a suitable apparatus where appropriate with the addition of further ingredients,
 - (ii) at least one diformate is added, where appropriate together with further ingredients and/or additives.
- 14. A process for producing preparations comprising
 - (i) at least one diformate of the general formula $XH(COOH)_2$, where X = Na, K, Cs, NH_4 and
 - (ii) at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one ester of the carboxylic acid and/or at least one derivative of the carboxylic acid, where the carboxylic acid comprises up to 12 C atoms, in which at least one diformate is coated by desublimation of at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one ester of the carboxylic acid and/or at least one derivative of the carboxylic acid.
- 15. A process for producing preparations comprising
 - (i) at least one diformate of the general formula $XH(COOH)_2$, where X = Na, K, Cs, NH_4 and
 - (ii) at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one ester of the carboxylic acid and/or at least one derivative of the carboxylic acid, where the carboxylic acid comprises up



to 12 C atoms, in which

- (a) at least one diformate, where appropriate together with other ingredients and/or additives, is dispersed in at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one ester of the carboxylic acid and/or at least one derivative of the carboxylic acid,
- (b) emulsified in an aqueous solution of a protective colloid, preferably gelatin or/and gelatin derivatives or/and gelatin substitutes with the addition of one or more substances from the group of mono-, di- and polysaccharides,
- (c) and subjected to a shaping by spraying and subsequent or simultaneous drying.
- 16. The use of a preparation as claimed in at least one of the preceding claims in premixes for animal feeds.
- 17. The use of a preparation as claimed in at least one of the preceding claims in feed additives and/or animal feeds, in particular for pigs, poultry and calves.
- 18. A process for producing a diformate-containing feed and/or feed additive, which comprises
 - (i) adding preparation as claimed in any of claims 1 to 8 to a premix,
 - (ii) mixing the premix obtained in this way with the other ingredients of the feed and/or feed additive.
- 19. An animal feed comprising a preparation as claimed in at least one of the preceding claims.
- 20. The use of a preparation as claimed in at least one of the preceding claims as performance enhancer and/or growth promoter.
- 21. The use of a preparation as claimed in at least one of the preceding claims as acidifier.
- 22. The use of a preparation as claimed in at least one of the preceding claims as preservative.
- 23. The use of a preparation as claimed in at least one of the preceding claims as ensiling agent.

24. The use of a preparation comprising

- (i) at least one diformate of the general formula XH(COOH)₂, where X = Na, K, Cs, NH₄ and
- (ii) at least one carboxylic acid and/or at least one salt of the carboxylic acid and/or at least one ester of the carboxylic acid and/or at least one derivative of the carboxylic acid, where the carboxylic acid comprises up to 12 C atoms,

in fertilizers.